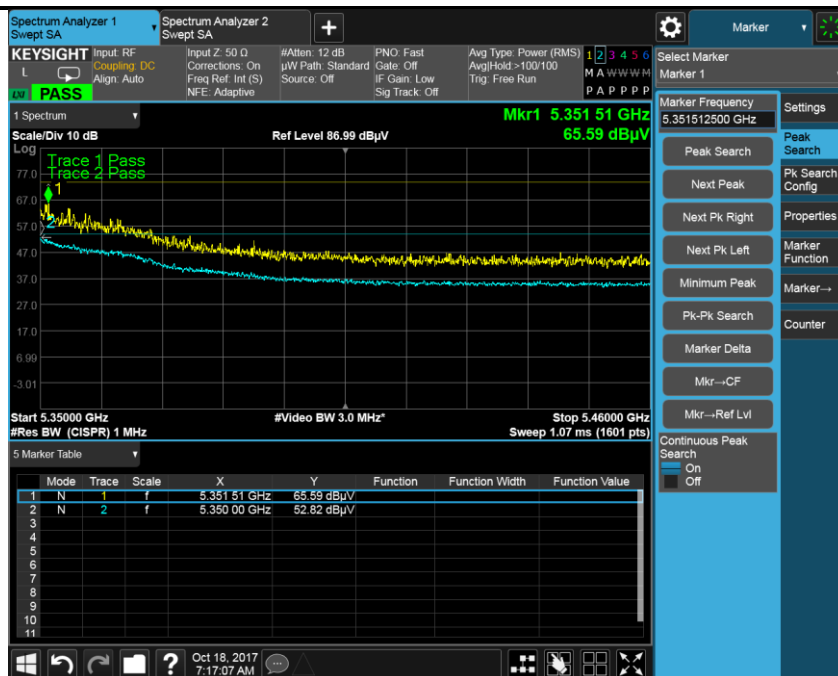
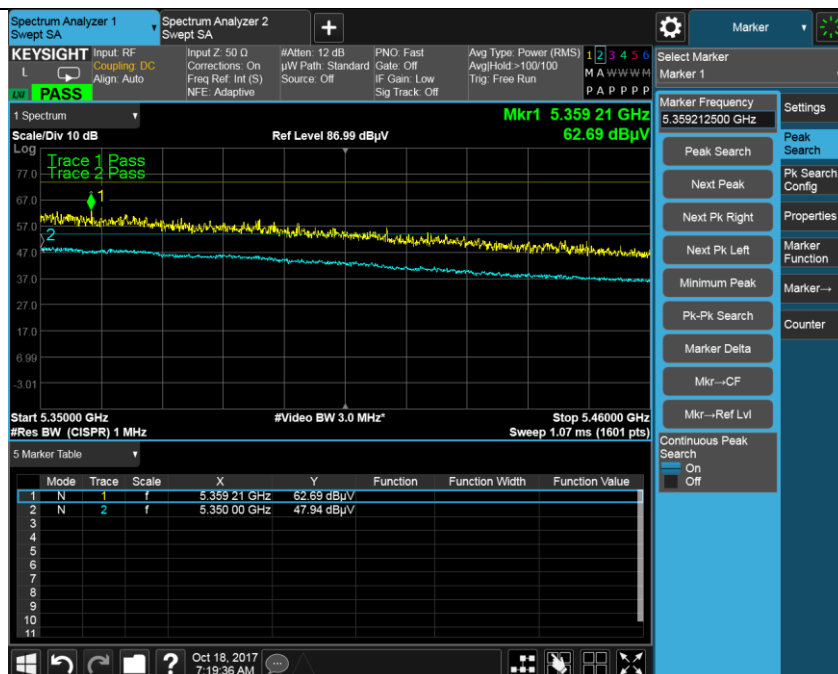
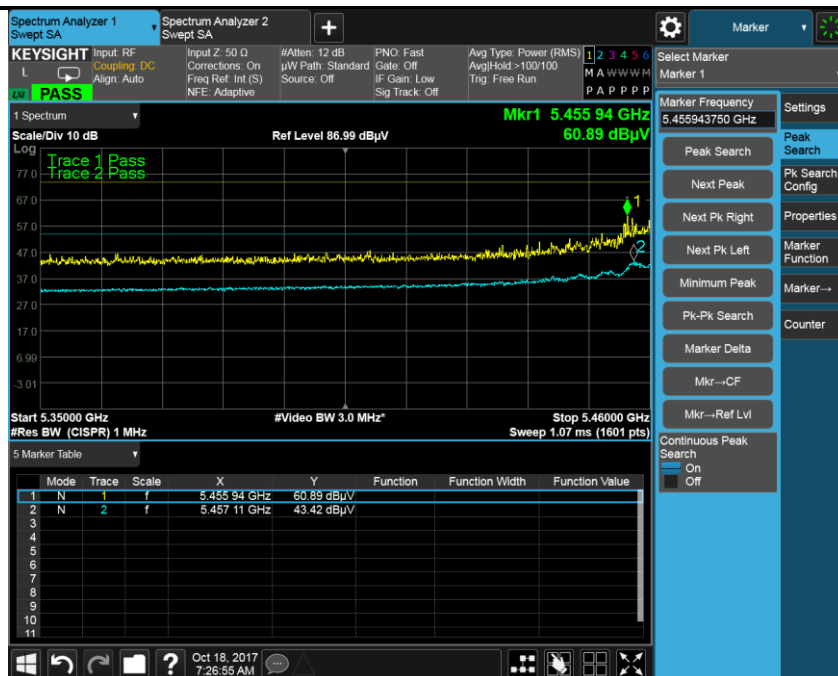




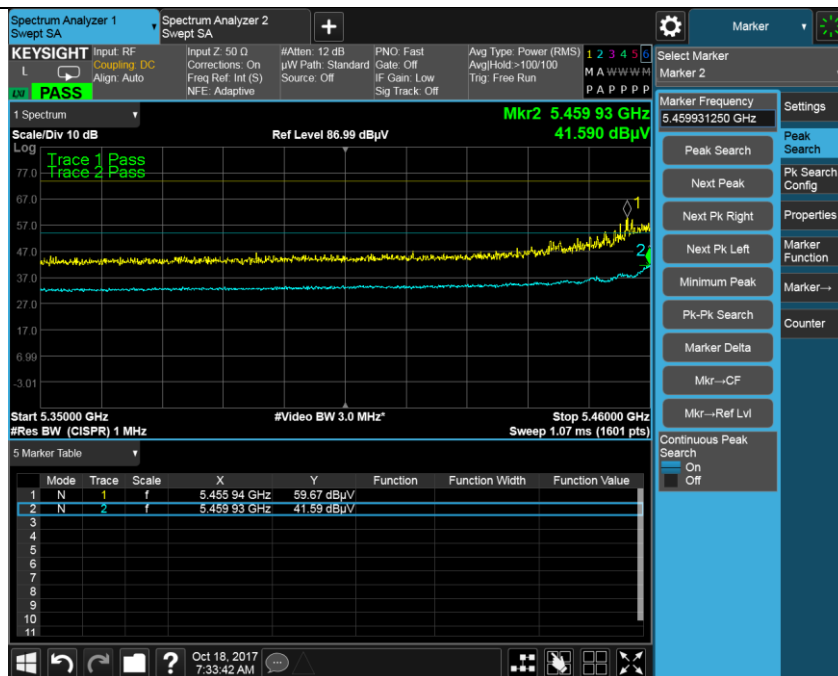
802.11n-HT40 5310M(5350-5460MHz)



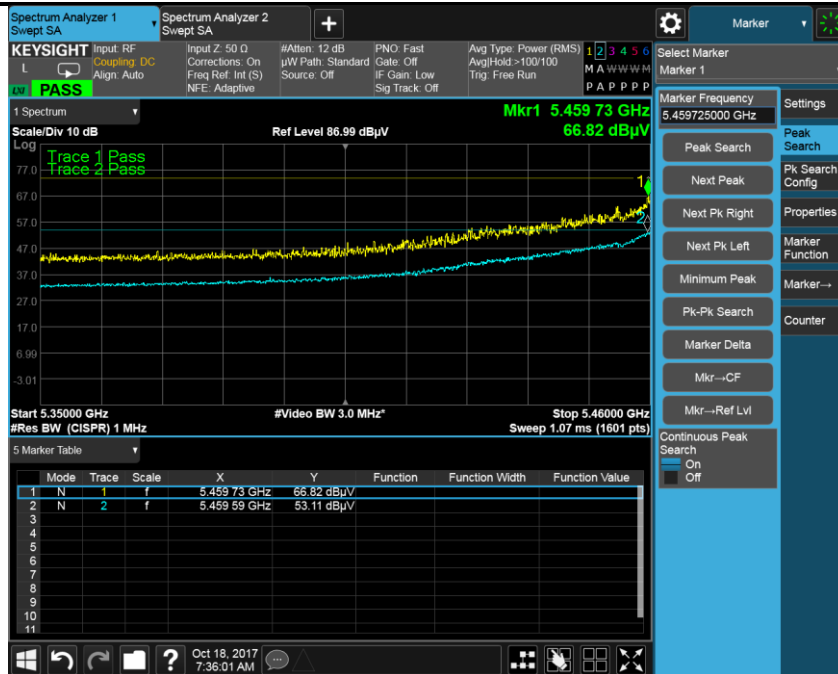
802.11ac 5290M(5350-5460MHz)



802.11a 5500M(5350-5460MHz)



802.11n-HT20 5500M(5350-5460MHz)



802.11n-HT40 5510M(5350-5460MHz)



802.11ac 5530M(5350-5460MHz)

Radiated Emission Test Results (Above 1GHz)

W53 band:

Above 1GHz-40GHz – 802.11a – 5260MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
15777.23	38.71	8.36	6.28	53.35	Peak Max	V	242	260	74	-20.65	Pass
10518.25	43.01	6.77	2.44	52.22	Peak Max	H	110	322	74	-21.78	Pass
15777.23	26.71	8.36	6.28	41.35	Average Max	V	242	260	54	-12.65	Pass
10518.25	29.96	6.77	2.44	39.17	Average Max	H	110	322	54	-14.83	Pass

Above 1GHz-40GHz – 802.11a – 5280MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
15837.94	39.33	8.39	6.33	54.05	Peak Max	V	152	249	74	-19.96	Pass
10560.02	44.83	6.79	2.25	53.87	Peak Max	H	203	108	74	-20.13	Pass
15837.94	26.58	8.39	6.33	41.3	Average Max	H	400	50	54	-12.7	Pass
10560.02	31.09	6.79	2.25	40.13	Average Max	H	203	108	54	-13.87	Pass

Above 1GHz-40GHz – 802.11a – 5320MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
17904.59	39.03	8.15	11.42	58.6	Peak Max	H	279	316	74	-15.4	Pass
10643.34	45.7	6.84	2.13	54.67	Peak Max	V	218	52	74	-19.33	Pass
17904.59	26.55	8.15	11.42	46.12	Average Max	H	279	316	54	-7.88	Pass
10643.34	32.92	6.84	2.13	41.89	Average Max	V	218	52	54	-12.11	Pass

Above 1GHz-40GHz – 802.11n-20M – 5260MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
15778.71	38.9	8.36	6.28	53.55	Peak Max	H	254	118	74	-20.45	Pass
10517.92	47.6	6.77	2.44	56.81	Peak Max	H	189	36	74	-17.19	Pass
15778.71	26.82	8.36	6.28	41.47	Average Max	V	299	115	54	-12.53	Pass
10517.92	32.97	6.77	2.44	42.18	Average Max	H	189	36	54	-11.82	Pass

Above 1GHz-40GHz – 802.11n-20M – 5280MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
10560.88	42.32	6.79	2.24	51.35	Peak Max	H	128	292	74	-22.65	Pass
15840.74	39.18	8.39	6.32	53.9	Peak Max	V	214	31	74	-20.10	Pass
10560.88	28.57	6.79	2.24	37.61	Average Max	H	128	292	54	-16.39	Pass
15840.74	26.56	8.39	6.32	41.27	Average Max	H	221	320	54	-12.73	Pass

Above 1GHz-40GHz – 802.11n-20M – 5320MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
15959.53	38.83	8.45	6.35	53.62	Peak Max	H	99	249	74	-20.38	Pass
10638.69	44.85	6.84	2.12	53.81	Peak Max	V	120	320	74	-20.19	Pass
15959.53	26.77	8.45	6.35	41.57	Average Max	H	99	249	54	-12.43	Pass
10638.69	32.41	6.84	2.12	41.37	Average Max	V	120	320	54	-12.63	Pass

Above 1GHz-40GHz – 802.11n-40M – 5270MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
17700.75	38.1	8.07	11.55	57.72	Peak Max	H	144	247	74	-16.28	Pass
10542.18	40.23	6.78	2.33	49.34	Peak Max	H	206	296	74	-24.66	Pass
17700.75	26.36	8.07	11.55	45.99	Average Max	H	144	247	54	-8.02	Pass
10542.18	27.7	6.78	2.33	36.81	Average Max	H	206	296	54	-17.19	Pass

Above 1GHz-40GHz – 802.11n-40M – 5310MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
17967.37	38.11	8.18	11.01	57.3	Peak Max	H	252	112	74	-16.7	Pass
10619.73	40.7	6.83	2.09	49.62	Peak Max	H	108	14	74	-24.38	Pass
10619.73	28.2	6.83	2.09	37.12	Average Max	V	115	82	54	-16.88	Pass
17967.37	26.54	8.18	11.01	45.73	Average Max	H	252	112	54	-8.27	Pass

Above 1GHz-40GHz – 802.11ac-80M – 5290MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
17676.95	38	8.06	11.49	57.56	Peak Max	V	306	335	74	-16.44	Pass
10580.71	39.89	6.81	2.15	48.85	Peak Max	V	99	15	74	-25.15	Pass
17676.95	26.27	8.06	11.49	45.82	Average Max	V	306	335	54	-8.18	Pass
10580.71	27.09	6.81	2.15	36.05	Average Max	V	99	15	54	-17.95	Pass

W56 band:

Above 1GHz-40GHz – 802.11a – 5500MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
17574.41	38.39	8.02	11.06	57.48	Peak Max	V	400	163	74	-16.52	Pass
11001.05	42.85	7.04	2.33	52.22	Peak Max	V	104	325	74	-21.78	Pass
17574.41	26.44	8.02	11.06	45.52	Average Max	V	400	163	54	-8.48	Pass
11001.05	29.44	7.04	2.33	38.82	Average Max	V	104	325	54	-15.18	Pass

Above 1GHz-40GHz – 802.11a – 5580MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11160.96	41.12	7.26	2.92	51.3	Peak Max	V	230	18	74	-22.70	Pass
16738.28	38.35	8.38	7.88	54.6	Peak Max	V	243	324	74	-19.40	Pass
11160.96	28.47	7.26	2.92	38.65	Average Max	V	230	18	54	-15.35	Pass
16738.28	26.19	8.38	7.88	42.45	Average Max	V	243	324	54	-11.55	Pass

Above 1GHz-40GHz – 802.11a – 5700MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11401.27	44.89	7.58	3.16	55.64	Peak Max	V	99	17	74	-18.37	Pass
17099.57	37.87	8.18	8.71	54.77	Peak Max	V	261	172	74	-19.23	Pass
11401.27	31.06	7.58	3.16	41.8	Average Max	V	99	17	54	-12.20	Pass
17099.57	25.72	8.18	8.71	42.62	Average Max	V	261	172	54	-11.39	Pass

Above 1GHz-40GHz – 802.11n-20M – 5500MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11400.84	44.05	7.58	3.17	54.8	Peak Max	V	186	345	74	-19.20	Pass
17099.38	37.88	8.18	8.71	54.78	Peak Max	V	99	62	74	-19.22	Pass
11400.84	31.38	7.58	3.17	42.12	Average Max	V	186	345	54	-11.88	Pass
17099.38	25.77	8.18	8.71	42.67	Average Max	H	110	190	54	-11.33	Pass

Above 1GHz-40GHz – 802.11n-20M – 5580MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
16502.40	50.67	8.51	7.33	66.51	Peak Max	V	180	285	74	-7.49	Pass
11002.49	57.61	7.04	2.34	66.99	Peak Max	V	162	297	74	-7.01	Pass
16502.40	33.88	8.51	7.33	49.72	Average Max	V	180	285	54	-4.28	Pass
11002.49	43.66	7.04	2.34	53.04	Average Max	V	162	297	54	-0.96	Pass

Above 1GHz-40GHz – 802.11n-20M – 5700MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
16741.07	45.45	8.37	7.88	61.7	Peak Max	V	111	51	74	-12.30	Pass
11159.49	53.99	7.26	2.92	64.16	Peak Max	V	130	67	74	-9.84	Pass
16741.07	30.82	8.37	7.88	47.07	Average Max	V	111	51	54	-6.94	Pass
11159.49	40.05	7.26	2.92	50.23	Average Max	V	130	67	54	-3.77	Pass

Above 1GHz-40GHz – 802.11n-40M – 5510MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11021.46	39.58	7.07	2.42	49.07	Peak Max	V	258	293	74	-24.93	Pass
16529.64	37.94	8.49	7.61	54.04	Peak Max	V	101	146	74	-19.96	Pass
11021.46	26.27	7.07	2.42	35.76	Average Max	V	258	293	54	-18.24	Pass
16529.64	26.2	8.49	7.61	42.3	Average Max	V	101	146	54	-11.7	Pass

Above 1GHz-40GHz – 802.11n-40M – 5550MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11180.76	39.72	7.29	2.98	49.98	Peak Max	V	236	38	74	-24.02	Pass
16769.20	38.48	8.36	7.84	54.67	Peak Max	V	152	34	74	-19.33	Pass
11180.76	27.33	7.29	2.98	37.59	Average Max	V	236	38	54	-16.41	Pass
16769.20	26.17	8.36	7.84	42.37	Average Max	V	152	34	54	-11.63	Pass

Above 1GHz-40GHz – 802.11n-40M – 5670MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11340.33	39.66	7.5	2.84	50	Peak Max	V	205	26	74	-24.01	Pass
17008.73	38.32	8.23	7.74	54.29	Peak Max	V	123	287	74	-19.72	Pass
11340.33	26.95	7.5	2.84	37.29	Average Max	V	205	26	54	-16.71	Pass
17008.73	26.01	8.23	7.74	41.98	Average Max	V	123	287	54	-12.02	Pass

Above 1GHz-40GHz – 802.11ac-80M – 5530MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11058.31	38.8	7.12	2.57	48.49	Peak Max	V	185	56	74	-25.51	Pass
16589.72	38.02	8.46	8.21	54.68	Peak Max	V	269	27	74	-19.32	Pass
11058.31	26.56	7.12	2.57	36.25	Average Max	V	185	56	54	-17.75	Pass
16589.72	26.06	8.46	8.21	42.72	Average Max	V	269	27	54	-11.28	Pass

Above 1GHz-40GHz – 802.11ac-80M – 5610MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
11219.67	40.04	7.34	2.95	50.33	Peak Max	V	215	24	74	-23.67	Pass
16829.65	38.29	8.32	7.93	54.55	Peak Max	V	173	190	74	-19.45	Pass
11219.67	26.98	7.34	2.95	37.27	Average Max	V	215	24	54	-16.73	Pass
16829.65	26.07	8.32	7.93	42.32	Average Max	V	173	190	54	-11.68	Pass

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Cycle	Cal Due	In use
Conducted Emissions						
R & S Receiver	ESIB 40	100179	06/08/2017	1 Year	06/08/2018	☒
CHASE LISN	MN2050B	1018	08/07/2017	1 Year	08/07/2018	☒
Radiated Emissions						
R & S Receiver	ESIB 40	1018	08/07/2017	1 Year	08/07/2018	☒
Bi-Log antenna (30MHz~2GHz)	JB1	A030702	08/12/2017	1 Year	08/12/2018	☒
Horn Antenna (1GHz~26GHz)	3115	100059	08/25/2017	1 Year	08/25/2018	☒
RF Conducted Measurement						
Spectrum Analyzer	N9010A	10SL0219	08/20/2017	1 Year	08/20/2018	☒
R & S Receiver	ESIB 40	100179	06/08/2017	1 Year	06/08/2018	☒
ETS-Lingren USB RF Power Sensor	7002-006	10SL0190	09/03/2017	1 Year	09/03/2018	☒

Annex B. SIEMIC Accreditation

Accreditations	Document	Scope / Remark
ISO 17025 (A2LA)		Please see the documents for the detailed scope
ISO Guide 65 (A2LA)		Please see the documents for the detailed scope
TCB Designation		A1 , A2 , A3 , A4 , B1 , B2 , B3 , B4 , C
FCC DoC Accreditation		FCC Declaration of Conformity Accreditation
FCC Site Registration		3 meter site
FCC Site Registration		10 meter site
IC Site Registration		3 meter site
IC Site Registration		10 meter site
EU NB		Radio & Telecommunications Terminal Equipment: EN45001 – EN ISO/IEC 17025
		Electromagnetic Compatibility: EN45001 – EN ISO/IEC 17025
Singapore iDA CB(Certification Body)		Phase I , Phase II
Vietnam MIC CAB Accreditation		Please see the document for the detailed scope
Hong Kong OFCA		(Phase II) OFCA Foreign Certification Body for Radio and Telecom
		(Phase I) Conformity Assessment Body for Radio and Telecom
Industry Canada CAB		Radio: Scope A – All Radio Standard Specification in Category I
		Telecom: CS-03 Part I, II, V, VI, VII, VIII

Japan Recognized Certification Body Designation		Radio: A1. Terminal equipment for purpose of calling Telecom: B1. Specified radio equipment specified in Article 38-2, Paragraph 1, Item 1 of the Radio Law
Korea CAB Accreditation		EMI: KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMI EMS: KCC Notice 2008-38, RRL Notice 2008-4: CA Procedures for EMS KN24, KN61000-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11: Test Method for EMS Radio: RRL Notice 2008-26, RRL Notice 2008-2, RRL Notice 2008-10, RRL Notice 2007-49, RRL Notice 2007-20, RRL Notice 2007-21, RRL Notice 2007-80, RRL Notice 2004-68 Telecom: President Notice 20664, RRL Notice 2007-30, RRL Notice 2008-7 with attachments 1, 3, 5, 6; President Notice 20664, RRL Notice 2008-7 with attachment 4
Taiwan NCC CAB Recognition		LP0002, PSTN01, ADSL01, ID0002, IS6100, CNS14336, PLMN07, PLMN01, PLMN08
Taiwan BSMI CAB Recognition		CNS 13438
Japan VCCI		R-3083: Radiation 3 meter site C-3421: Main Ports Conducted Interference Measurement T-1597: Telecommunication Ports Conducted Interference Measurement
Australia CAB Recognition		EMC: AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4 Radio communications: AS/NZS 4281, AS/NZS 4268, AS/NZS 4280.1, AS/NZS 4280.2, AS/NZS 4295, AS/NZS 4582, AS/NZS 4583, AS/NZS 4769.1, AS/NZS 4769.2, AS/NZS 4770, AS/NZS 4771 Telecommunications: AS/ACIF S002:05, AS/ACIF S003:06, AS/ACIF S004:06 AS/ACIF S006:01, AS/ACIF S016:01, AS/ACIF S031:01, AS/ACIF S038:01, AS/ACIF S040:01, AS/ACIF S041:05, AS/ACIF S043.2:06, AS/ACIF S60950.1
Australia NATA Recognition		AS/ACIF S002, AS/ACIF S003, AS/ACIF S004, AS/ACIF S006, AS/ACIF S016, AS/ACIF S031, AS/ACIF S038, AS/ACIF S040, AS/ACIF S041, AS/ACIF S043.2